



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D5522-042
Job Sheet R174353



Part No: D5522-042

Job Qty: 2 ea

Part Name: Oil Drain Valve Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 3/14/18

Job Tracking No:

Due Date: 3/23/18

Created By: Linda Lacelle

Type: Rework

Description:

Note: D5522 REV.C IPP Rev: A RQ 17.04.12 Verified by: DD IPP REV:B 17.05.12 AS PER DWG REV.A DD
VERF:JFS IPP REV:C 17.09.19 AS PER DWG REV.C DD VERF:JFS IPP REV:D 17.11.17 MODIFY
PROCESS AND BOM AS PER INTUITIVE DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea	3/22/18	3/22/18	0.00	0.00	Start Up Small Fab-4		
110	Rework	2 pcs	3/22/18	3/22/18	0.00	0.00	Small Fab-4	Disassemble	
120	Rework	2 pcs	3/22/18	3/22/18	0.00	0.00	Mill Conv 1		
140	Small Fab	2 pcs	3/23/18	3/23/18	0.00	2.43	Small Fab-4	Reassemble	
150	QC	2 pcs	3/23/18	3/23/18	0.00	0.00	QC5		
160	Packaging	2 pcs	3/23/18	3/23/18	0.00	0.00	Packaging3-2	St/66	
170	QC21-SA	2 Ea	3/23/18	3/23/18	0.00	0.00	QC21		

Part Op 140 - ***BEFORE ASSEMBLY VERIFY IF THE PART IS CLEAN INSIDE*** Assemble D5522-042 as per Dwg D5522, Descriptions: note 8-9-10,11,12.*** 1- INSTALL D5527-1 AS PER DWG WITH PERMATEX THREAD SEALANT. TORQUE AS PER DWG NOTE 8. BATCH: M137935 VERIFY TORQUE BY: SB *****BEFORE INSTALLING AN814-4J PLUG AND D5530-1 FITTING REMOVE ORINGS (SCRAP THEM) AND REPLACE THEM WITH M83248/1-012 PACKING***** 2- INSTALL AN814-4J PLUG, D5370-1 AND D5530-1 FITTING AS PER DWG WITH OIL LUB 2380. TORQUE AS PER DWG NOTE 9. 2380 BATCH: M138073 VERIFY TORQUE BY: SB 3- LOCKWIRE AS PER DWG, SEE NOTE 10. 4- ATTACH VALVE CAP WITH LANDYARD AS PER DWG NOTE 11. (PICK CBL460 AND CBL1240)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D5522-042	Oil Drain Valve Assembly	2 Ea (1 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D5522-042	2	2	0

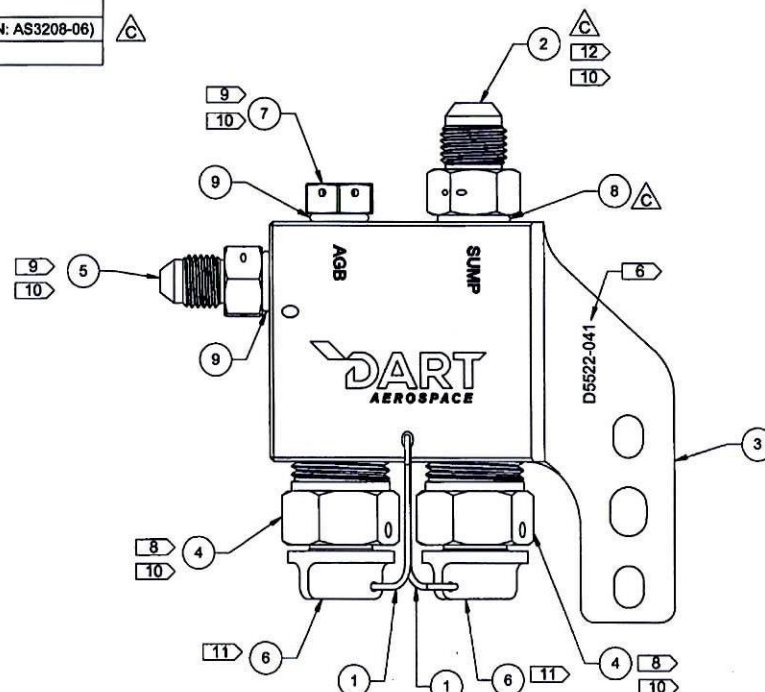
Part Specifications

Specifications could not be found.

open one hole and tape per Section A-A.
Slot holes per dwg section A-A

Plex 3/14/18 1:06 PM dart.lacelle.linda

ITEM	QTY	P/N	DESCRIPTION
	X	D5522-041	OIL DRAIN VALVE ASSY
1	2	D2690-4	LANYARD
2	1	D5370-1	ADAPTER, FLARED TUBE FITTING
3	1	D5522-1	OIL DRAIN VALVE MOUNT
4	2	D5527-1	OIL DRAIN VALVE
5	1	D5530-1	ADAPTER, FLARED TUBE FITTING
6	2	D5532-041	VALVE CAP
7	1	AN814-4JL	PLUG
8	1	M83248/1-906	PACKING (ALT P/N: AS3208-06)
9	2	M83248/1-012	PACKING



D5522-041 OIL DRAIN VALVE ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH ASSEMBLY NUMBER "D5522-041" PER QSI 044 6.1
- 7) WEIGHT: 1.29 lbs
- 8) THREAD SEALANT: PERMATEX 80632; TORQUE: 155-165 IN.LBS.
- 9) THREAD SEALANT: LUBRICATING OIL; TORQUE: 96-108 IN.LBS
- 10) LOCKWIRE (Ø0.032 LOCKWIRE) IN PLACE PER AC43.13-1B CHAPTER 7 SECTION 7
- 11) ATTACH D5532-041 VALVE CAPS TO THE D5522-1 VALVE MOUNT USING D2690-4 LANYARDS
- 12) THREAD SEALANT: LUBRICATING OIL; TORQUE: 132-144 IN.LBS

RELEASED
2017-09-19
EEN 17-613

APPROVED

C	ADDED PROVISIONS FOR -6 FITTINGS, REMOVED UNNECESSARY LOCKWIRE HOLES (ZN B5-3), CHANGED MOUNTING HOLES TO SLOTS (ZN C3-3), UPDATED ASSEMBLY TORQUE SPECS (ZN A8-1 & A8-2), UPDATED PARTS LISTS	WK	17.09.07
B	ADDED DETAIL C (ZN D2-3) AND NOTE 10 (ZN A8-3); UPDATE DIMENSIONS (ZN B7-3)	WK	17.07.06
A	NEW ISSUE	WK	17.03.27
REV.	DESCRIPTION	BY	DATE
DESIGN	WK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D5522 TITLE OIL DRAIN VALVE ASSY SCALE NTS COPYRIGHT © 2017 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	WK		
CHECKED	VS		
MFG. APPR.	DD		
APPROVED	HS		
DE APPR.	DS	REV. C SHEET 1 OF 3	
DATE	17.09.07		

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

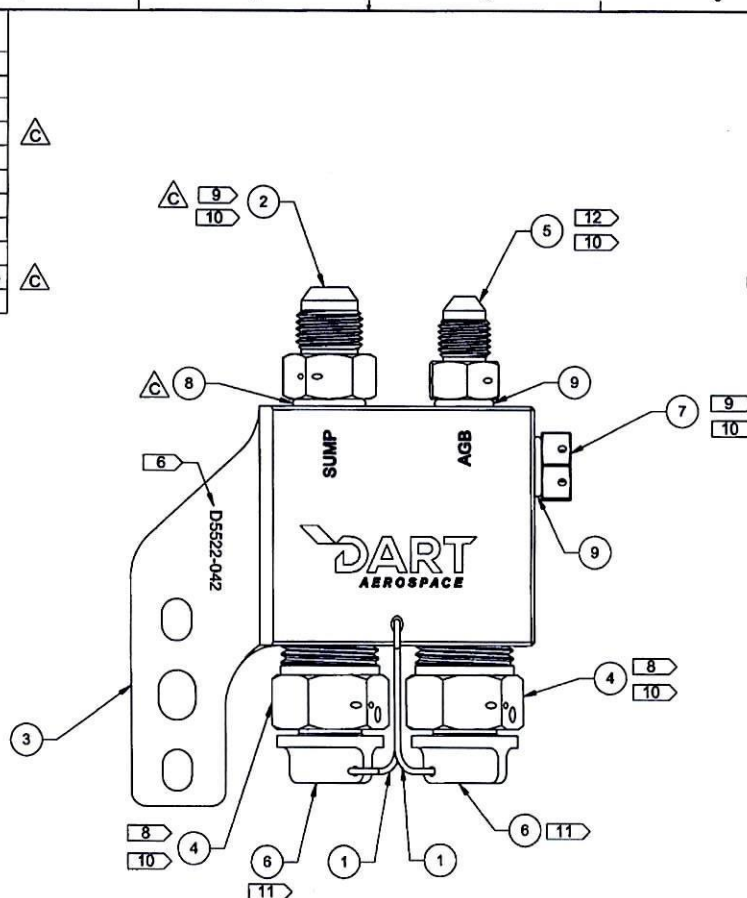


QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

ITEM	QTY -042	P/N	DESCRIPTION
	X	D5522-042	OIL DRAIN VALVE ASSY
1	2	D2690-4	LANYARD
2	1	D5370-1	ADAPTER, FLARED TUBE FITTING
3	1	D5522-1	OIL DRAIN VALVE MOUNT
4	2	D5527-1	OIL DRAIN VALVE
5	1	D5530-1	ADAPTER, FLARED TUBE FITTING
6	2	D5532-041	VALVE CAP
7	1	AN814-4JL	PLUG
8	1	M83248/1-908	PACKING (ALT P/N: AS3208-08)
9	2	M83248/1-012	PACKING



D5522-042 OIL DRAIN VALVE ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH ASSEMBLY NUMBER "D5522-042" PER QSI 044 6.1
- 7) WEIGHT: 1.29 lbs
- 8) THREAD SEALANT: PERMATEX 80632; TORQUE: 155-165 IN.LBS.
- 9) THREAD SEALANT: LUBRICATING OIL; TORQUE: 96-108 IN.LBS
- 10) LOCKWIRE (Ø0.032 LOCKWIRE) IN PLACE PER AC43.13-1B CHAPTER 7 SECTION 7
- 11) ATTACH D5532-041 VALVE CAPS TO THE D5522-1 VALVE MOUNT USING D2690-4 LANYARDS
- 12) THREAD SEALANT: LUBRICATING OIL; TORQUE: 132-144 IN.LBS

RELEASED
2017-09-19

APPROVED

DESIGN	WK	DART AEROSPACE LTD	
DRAWN	WK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	DD	D5522	SHEET 2 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	OIL DRAIN VALVE ASSY	NTS
DATE	17.09.07	COPYRIGHT © 2017 BY DART AEROSPACE LTD	
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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

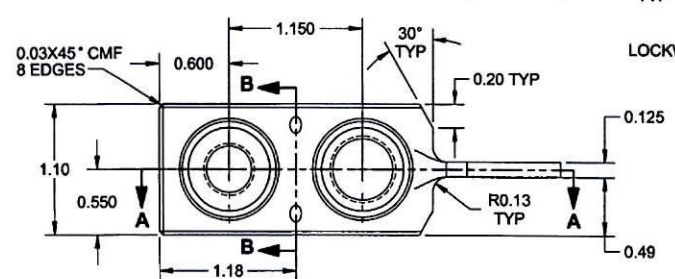
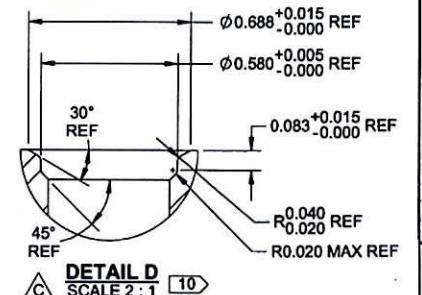
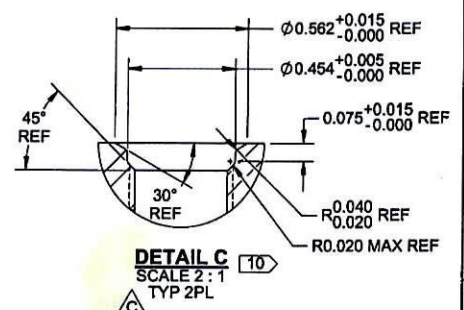
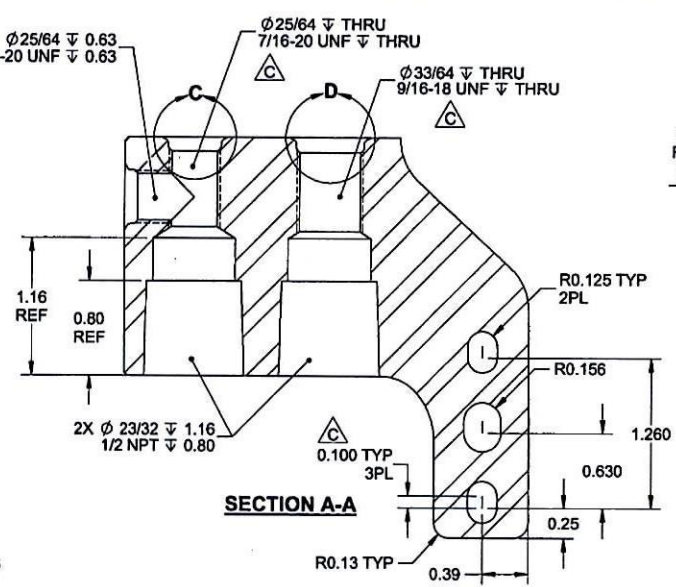
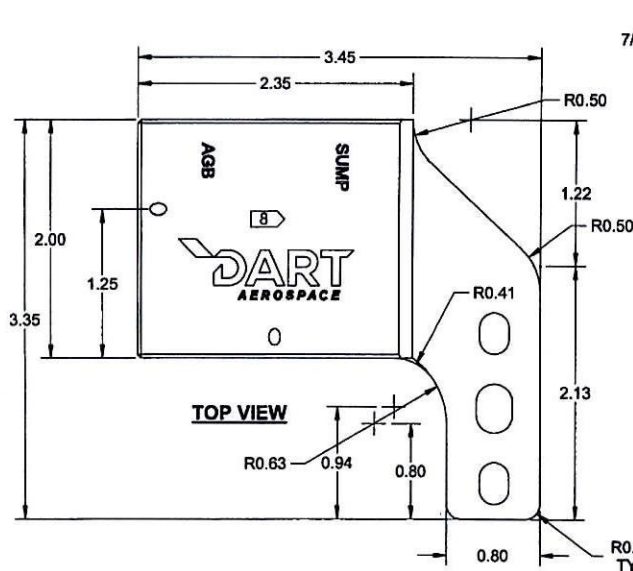


QA Closed: _____ Date: _____

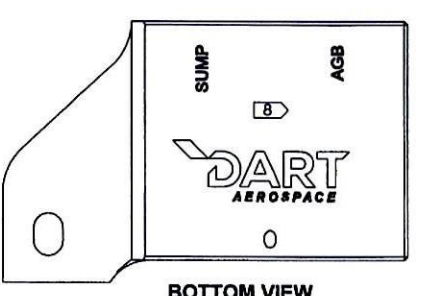
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

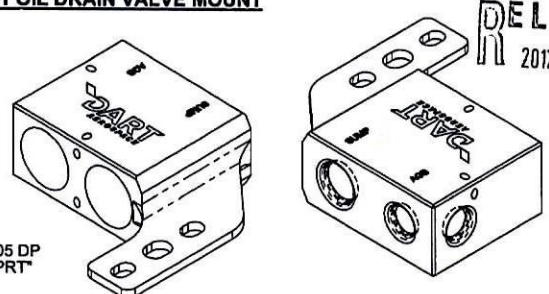
8 7 6 5 4 3 2 1



D5522-1 OIL DRAIN VALVE MOUNT



- NOTES:**
- 1) MATERIAL: AISI 303 SS BAR PER ASTM A582
REF. DART SPEC. M303B
OR:
AISI 304/316 SS BAR PER ASTM A276
REF. DART SPEC. M304B
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY AT NEXT HIGHER ASSEMBLY
 - 7) WEIGHT: 0.91 lbs
 - 8) ENGRAVE "DART" LOGO, "AGB" AND "SUMP" LABEL AS SHOWN 0.003 - 0.005 DP
 - 9) UNIDENTIFIED FEATURES CONTROLLED BY S.W. DRAWING "D5522-1.SLDPRT"
 - 10) MACHINE IAW MS33649 / AS5202



RELEASED
2017-09-19

DESIGN	WK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	WK		
CHECKED	VS	DRAWING NO. D5522	REV. C
MFG. APPR.	DD		SHEET 3 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	OIL DRAIN VALVE ASSY	NTS
DATE	17.09.07	COPYRIGHT © 2017 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

